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| 09/687,533      | 10/13/2000  | Jean-Claude Marty    | 5974-68             | 8929             |

27383 7590 04/22/2004  
CLIFFORD CHANCE US LLP  
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EXAMINER

BRODA, SAMUEL

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2123

DATE MAILED: 04/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/687,533

Applicant(s)

MARTY ET AL.

Examiner

Samuel Broda

Art Unit

2123

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 13 October 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☒ Claim(s) 1-29 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 October 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

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### **DETAILED ACTION**

1. Claims 1-29 have been examined.

#### ***Drawings***

2. The Draftsperson has objected to the drawings; see the copy of Form PTO-948 for an explanation.

#### ***Claim Objections***

3. The following is a partial quotation of 37 CFR § 1.75:

...

(i) Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation.

- 3.1 Claims 1-29 are objected to under 37 CFR § 1.75(i) because each element of each claim is not separated by a line indentation. Correction is required.

#### ***Claim Rejections - 35 U.S.C. § 112, First Paragraph***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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4.1 Claims 1-29 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

4.2 Regarding independent claims {1, 9, 17, 23}, claims 1, 17, and 23 contain the limitation “calculating a trace of possible placement points for attachment of the leader line to the object” and claim 9 contains a similar limitation.

While the Specification appears to describe the benefits of such a trace calculation, the Specification does not appear to indicate how the trace is calculated. Although the Specification at pages 10-12 lists many ISO standards that appear relevant to annotation placement, listing of these standards alone does not indicate how the trace is calculated.

Additionally, the Specification appears to lack flowcharts describing the steps necessary to perform the trace calculation. See MPEP Section 2106.02; see especially column 1 page 2100-27 (February 2003).

The Specification and accompanying figures do not appear to teach how one could make and/or use the invention but instead appear to describe the benefits of such an invention. Taken as a whole, only with undue experimentation could one reasonably skilled in the art make and/or use the invention, because of the omissions in the subject matter described in the Specification.

4.3 Regarding independent claims {5, 13, 19, 26}, claims 5, 19, and 29 contain the limitation “calculating a new location for said annotation such that the spatial relationship

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between the object and the annotation remains the same as before movement of the object” and claim 13 contains a similar limitation.

While the Specification appears to describe the benefits of such a spatial relationship calculation, the Specification does not appear to indicate how the relationship is calculated.

Additionally, the Specification appears to lack flowcharts describing the steps necessary to perform the relationship calculation. See MPEP Section 2106.02; see especially column 1 page 2100-27 (February 2003).

The Specification and accompanying figures do not appear to teach how one could make and/or use the invention but instead appear to describe the benefits of such an invention. Taken as a whole, only with undue experimentation could one reasonably skilled in the art make and/or use the invention, because of the omissions in the subject matter described in the Specification.

**4.4** Regarding independent claims {6, 14, 20, 27}, claims 6, 20, and 27 contain the limitations:

- (1) “determining the type of said annotation, and retrieving annotation placement rules information stored in said system pertaining to said type of annotation,” and
- (2) “determining from said retrieved information whether the plane chosen by the user for said annotation is consistent with said retrieved information.”

Claim 14 includes similar limitations.

While the Specification appears to describe the benefits of such a plane consistency calculation, the Specification does not appear to indicate how the plane consistency is calculated.

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Although the Specification at pages 10-12 lists many ISO standards that appear relevant to annotation placement, listing of these standards alone does not indicate how these standards are translated into “annotation placement rules.”

Additionally, the Specification appears to lack flowcharts describing the steps necessary to perform the plane consistency calculation. See MPEP Section 2106.02; see especially column 1 page 2100-27 (February 2003).

The Specification and accompanying figures do not appear to teach how one could make and/or use the invention but instead appear to describe the benefits of such an invention. Taken as a whole, only with undue experimentation could one reasonably skilled in the art make and/or use the invention, because of the omissions in the subject matter described in the Specification.

**4.5** Dependent claims not specifically described above are rejected using the same analysis.

### ***Claim Rejections - 35 U.S.C. § 101***

**5.** The following is a quotation of 35 U.S.C. 101:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

**5.1** Claims 17-22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

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5.2 Regarding independent claims 17 and 19-20, each claim recites “A computer data signal embodied in a digital data stream comprising data representing the physical configuration of an object” with claim limitations directed to the method steps for generating the signal. Although the underlying method steps appear statutory, a computer data signal itself does not appear to fall under any of the four classes of statutory subject matter listed above in Section 101 and the computer data signal appears uncoupled with any physical structure that could make the resulting combination statutory.

Additionally, the computer data signal comprises “data representing the physical configuration of an object” that appears to be nonfunctional descriptive material lacking a functional relationship to the computing process. See MPEP Section 2106, subsection IV.B.1(b).

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to Applicants’ disclosure. Reference to Harrison et al, U.S. Patent 6,611,725 is cited as teaching a CAD system including generating updated drawing documents having generated tag data and input for annotations.

Reference to Gantt, U.S. Patent 5,572,639, is cited as teaching updating graphic object relationships according to rules of geometric conduct.

Reference to Onitake et al, U.S. Patent 5,506,948, is cited as teaching a geometric correction method that recognizes the topology of geometric data elements.

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Reference to Goldberg, "Customizing Annotations, and Predictions for the Future," CADalyst, Vol. 17 No. 3, pp. 66-68 (March 2000), is cited as describing the annotation features of the "Architectural Desktop" software by AutoCAD.

Reference to Hutton et al, "A Strategy for On-line Interpretation of Sketched Engineering Drawings," IEEE Proceedings of the Fourth International Conference on Document Analysis and Recognition, Vol. 2, pp. 771-775 (August 1997), is cited as teaching the automated interpretation of hand drawings into outlines and annotations.

Reference to Lieberman, "Graphical Annotation as a Visual Language for Specifying Generalization Relations," Proceedings of the 1993 Symposium on Visual Languages, pp. 19-24 (August 1993), is cited as teaching a graphical editor that constructs groupings of annotation graphics and object parts.

Reference to Vivier et al, "Annotator: An AI Approach to Engineering Drawing Annotation," ACM Proceedings of the First International Conference on Industrial and Engineering Applications of Artificial Intelligence and Expert Systems, Vol. 1, pp. 447-455 (1988), is cited as teaching the potential for fully automating the annotation process through representation of the knowledge about a piping model and its dimensioning requirements within a rule-based, objected-orientated hierarchy.

7. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Samuel Broda, whose telephone number is (703) 305-1026. The Examiner can normally be reached on Mondays through Fridays from 8:00 AM – 4:30 PM.



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If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Kevin Teska, can be reached at (703) 305-9704. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist, whose telephone number is (703) 305-3900.



**SAMUEL BRODA, ESQ.**  
**PRIMARY EXAMINER**